John Paul

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Professional Summary

Junior Computer Science student at James Madison University with hands-on experience in full-stack development, systems programming, and data structures. Passionate about building efficient, user-focused software solutions through strong problem-solving and collaborative development. Proficient in Java, Python, and C, with project experience spanning virtual memory simulation, database-driven web applications, and mathematical computation. Seeking a software engineering internship to apply technical and analytical skills in a real-world environment.

Education

James Madison University — B.S. in Computer Science

Harrisonburg, VA | Expected Graduation: May 2027

Relevant Coursework: Software Engineering, Data Structures & Algorithms, Computer Systems I, Database Systems

J. Sargeant Reynolds Community College — A.A. in Social Sciences

Richmond, VA | May 2023

Relevant Coursework: Programming Foundations, Web Development, Data Analytics

Technical Skills

Languages: Java, Python, C, HTML, CSS, JavaScript, SQL
Tools & Platforms: GitHub, Visual Studio Code, PyCharm, Xcode, PGAdmin 4, Adobe Dreamweaver, Eclipse
Concepts: OOP, Algorithm Analysis, Data Structures, Virtual Memory, CPU Architecture, Database Design, Web Development, Assembly (y86, x86)

Technical Projects

Rimplex Calculator — Java | Software Engineering Course Project

- Designed and implemented a calculator supporting complex arithmetic and regular expression evaluation.
- Built modular object-oriented components for computation, parsing, and error handling.
- Enhanced with a graphical interface to visualize complex number operations.
- Strengthened collaboration using GitHub version control for project management.

Virtual Memory Simulation (Mini-ELF Project) — C | Computer Systems I

- Developed a program to simulate virtual memory and CPU execution using the Von Neumann architecture model.
- Implemented functionality to read and parse Mini-ELF header files and map program segments into virtual memory.
- Translated binary data into y86 assembly instructions and executed them in a virtualized environment.
- Deepened understanding of low-level memory management, CPU cycles, and system-level programming.

JMU Dining Web Application — PostgreSQL, HTML, CSS, JavaScript | Database Systems Project

- Collaborated in a team to redesign JMU's dining website into a streamlined, user-friendly web application.
- Integrated database features allowing users to filter menus by dietary preferences and location.
- Applied SQL database design principles and front-end development for dynamic data retrieval.
- Used GitHub for collaborative version control and project coordination.

Personal Portfolio Website — HTML, CSS, JavaScript

- Built and deployed a responsive personal website showcasing academic and personal projects.
- Practiced modern web development standards, including semantic HTML and reusable components.

Past work experience

Subway: 03/2021 - 08/2024

- Learned how to communicate and collaborate within a team setting
- Demonstrated strong work ethic by consistently meeting expectations for timeliness, dependability, and task ownership.